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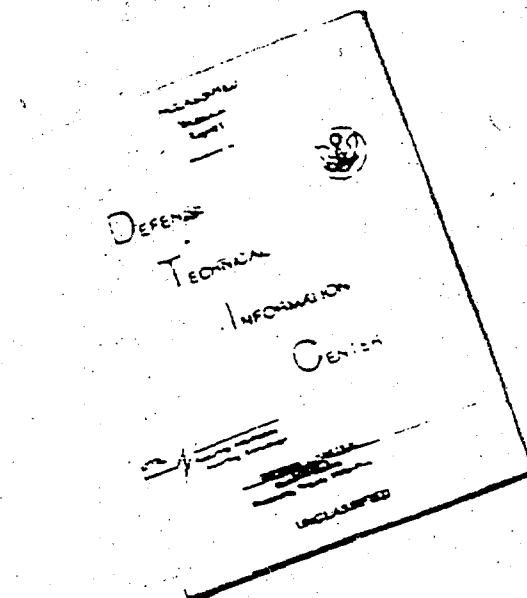
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Bacter. weapon

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(Anonymous) B.B. BACTERIOLOGICAL WEAPON.

(From the Bulgarian) Voenno izvestiya, 1959, 9: No. 3, p. 20-21;  
transl. by Claudius F. Mayer, M.D., July 1959, Washington).

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The pathogenic microorganisms and their toxins which are employed in time of war for the purpose of drawing away from their formations and of destroying the manpower of the Army, the population, and the animals and plants of the rural economy are comprehended under the general designation of bacteriological weapon. According to the occasions, not only pathogenic microorganisms, but also carriers (spreaders) of infectious diseases such as insects, ticks and other bacteriological agents are also coming to employment. Therefore, the bacteriological weapon is also called biological.

As far back as the 18th century, in the racial struggle for the enslavement of the Indians, the American Army has used at a grand scale different ways and means for the infection of its opponent with smallpox and with other diseases. The Armed Forces of the United States applied the bacteriological weapon also in the unjust war against the Korean Nation in 1950-1953 years.

Professor ROZDOLNI, of the Columbia University, in his book "Peace or Pestilence", wrote that in the year 1941, at Camp Detrick, of the State of Maryland in the U.S.A., with the participation of a large number of specialists, production of a bacteriological weapon has been organized. Later, center of such production had been created in the States of Mississippi, Utah, and Indiana. For the work on the bacteriological weapon, in

Camp Detrick alone, more than 11,000 (four thousand) microbiologists had been recruited. For the coordination of the activity in these centers, a united civilian and military council had been created.

At the same time, the American military authorities start a strenuous re-education of the public opinion as they endeavour to justify the employment of the bacteriological weapon. They call it an "ordinary combat means" whose application in time of war should be, according to them, permissible and lawful. The adherents of the employment of this weapon declare with unhidden cynicism that this will be more profitable since, by suffocating and killing off the people, their entire property and the other material values remain unaffected. It goes without saying that the American propaganda campaign passes over the fact in silence that the bacteriological weapon has been prohibited with the Hague Convention as far back as the year 1907.

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There exist very different bacteria in Nature. A part of them (about 90 percent) are not pathogenic. They are living on the surface of the human body or of the environmental objects and they feed on odds and ends. The other part of the bacteria (about 10 percent) feeds itself at the expense of the living tissues of the organism or of the plant, provoking disease or death. Those bacteria are called disease-creating or pathogenic. There are known more than a hundred infectious diseases caused by pathogenic bacteria.

The most widely spread microorganisms are the bacteria. They represent the lowest unicellular organisms, visible only under the microscope.

Most of them are an average of from 0.4 to 0.8 microns (a micron equals 0.001 of a millimeter). The period of their reproduction is about 15-20 minutes. The pathogenic bacteria are originators of the diseases: - exanthematic typhus, tuberculosis, plague, and so on.

Another group are the peculiar microorganisms, provoking diseases and spread by means of insects (lice, ticks, and so on). These microorganisms have been discovered in 1910 in the intestines of the typhus louse by the studies of Ricketts after whose name they received their own denomination. The rickettsias are the originators of the diseases: - smallpox, spotted and other kinds of fevers.

The virus are the originators of a series of infectious diseases in man, in animals and in plants (grippe, encephalitis, smallpox. They are still smaller than the bacteria and the other microorganisms. The majority of them has a size from 0.03 to 0.025 micron. The viruses pass through the bacterial filters for which reason they are also called filtrable viruses.

In the nature of a bacteriological weapon, the fungi are also employed as the originators of diseases in the plants of the rural economy and mostly in the monocotyledonous and leguminous plants.

The great ability of the pathogenic microorganisms to infect is explained mostly with their rapid reproduction. From a single microbe, in the course of 15-20 minutes, two microbes are formed by way of the division. With such a reproduction, in the time of 24 hours, an incredibly large amount of microorganisms may appear from a single microbe. That way the microbes have the ability to excrete toxins. Some of the microbes excrete them while still alive, others — after their death.

In the United States, as the American Press reports it, they divide the bacteriological weapon into two large groups. In the first belong the agents of diseases which spread their action quickly and over wide areas. Such microorganisms are the agents of plague, cholera, smallpox, grippe. It is well known with what speed the grippe epidemics were spreading in the years 1918-1919. In the course of half a year two epidemics, having broken out in China, three times ran around the earth globe and took the lives of 20 million persons.

In the second group of the bacteriological weapon the microorganisms belong which do not act quickly and over wide areas. They are the agents of malaria and so on, whose spread does not go by way of a contact with infected people, but by means of various carriers--mosquitoes, ticks, lice, etc. To this group are also added the toxins all of which infect the people only by direct effect.

The preservation of the produced bacteria is difficult, while the toxins, excreted in a pure form, will keep for an indefinitely long time. In connection with this it has been even thought that the conducting of the bacteriological warfare with the aid of microorganisms has already become antiquated, a less logical method than the employment of toxins. Their strength may be judged by the fact that the lethal dose for man is 0.035 milligram of the dry toxin. One gram of these toxins is the dose which is lethal for a huge mass of people.

The warmongers in the United States are planning for the future war the employment of a bacteriological weapon by various methods. We may judge about them to a certain extent by the attempts made by the Americans in Korea and in North Eastern China. Here is some of these methods.

Dropping of paper cylinders or cylinders made of a fine metal network with a series of not too much toxin on their walls, bombs of light metal or of plastic material, filled with infected insects or infected animals. Some of these bombs have been dropped by the Americans, filled with infected flies, spiders, fleas, beetles. Thus they tried to spread plague, Siberian ulcer (anthrax), dysentery, encephalitis, and other diseases. Cholera was spread with the aid of infected oceanic molluscs which were dropped into the reservoirs of drinking water. In the fresh water, the molluscs of the sea will die, but their decomposing bodies infect the water for a month. The Americans dropped also bombs with infected animals (mice, rats) with the aid of which they tried to disseminate plague and other diseases.

The dropping of infected objects from airplanes, for personal or group use,-- clothing, shoes, objects for domestic use, foods, etc.

The dropping of bird feathers, leaves and icicles from airplanes, infected with moulds and protein substances containing bacteria, etc.

Dispersion of dust infected with bacteria, from airplanes.

The Americans are also planning other methods for the employment of the bacteriological weapon, for instance:- the scattering of persons in the rear of the enemy to mislead the attention, the dissemination of bacteriologically infected smoke by means of the airplane, the dropping of artillery charges or mines, rockets of near or far action and of other pilotless means.

The American Press emphasizes that, with the aid of flying devices, the bacterial weapon can be used in wide areas of the deep rear zone of

the enemy. In connection with this, the research works of the Americans should be recorded with the release of aerial balloons over the territory of the Soviet Union and the countries of the people's democracy. Along with the tasks of the aerial reconnaissance of the territories of these countries, the conditions are also studied for the employment of balloons to conduct the bacterial warfare. Together with the research of the various methods for the spreading of the bacteriological weapon, the American military quarters are directing their researches for toward the reinforcement of the pathogenic strength of the bacteria. They pay special attention to the methods for making it difficult to recognize the diseases on the part of the enemy. For this purpose the employment of mixed infections had been worked out. Experiments are being made for the type-change of the microbes which are already familiar at the present time.

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The bacteriological weapon has a number of peculiarities in comparison with other types of weapon. It is not found with ordinary chemical and physical methods-- a special laboratory examination is necessary. Moreover, the bacteriological weapon infects not only those directly subjected to its effect but also the people who have come in contact with the infected persons.

The action of the bacteriological weapon is not at once recognized, but only a certain time after its employment, after the reproduction of the microorganisms. The incubation period of the various microorganisms varies from a minute to several weeks.

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In the United States, the steps for the protection against the bacteriological weapon are divided into collective and personal measures. To the first measures belong the equipments in the shelters with filtering-ventilating devices, the provision of preventive immunizations, the rendering of the waters harmless, the protection of the food products against infection, the supplying of the Army with specially impregnated underwear (treated with special solutions), the destruction of the mosquitoes and rodents. As measures for an individual protection are considered the strict observance of the rules for sanitary hygiene, the immediate use of the gas mask at the recognition of the bacteriological hit in a given district, the timely boiling of the water and of the products at suspicion that the enemy is using the bacteriological weapon. It is thought that if the water is boiled for 20 minutes all toxins are completely destroyed. The heating of the water to 80°C for the length of 30 to 60 minutes will also destroy the most powerful toxins.

The nations know from where the danger of the bacteriological warfare comes, who is preparing it and is prepared to kindle it. Therefore, as they brand with disgrace the fire-setters of war, the workers of the whole world demand the unconditional prohibition of the bacteriological weapon as a barbarian means for the conducting of warfares.

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